CLAIMS

What is Claimed is:

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1.   A method for encoding data for transmission in a communication system comprising the steps of:

partitioning a set of orthogonal codes into a first subset with a first number of members;

10   partitioning a first plurality of data bits associated with a first transmission into first packets;

encoding the first plurality of data bits by assigning each first packet to a corresponding member of the first subset;

partitioning a set of orthogonal codes into a second subset

15   with a second number of members, the second number of members being different than the first number of members;

partitioning a second plurality of data bits associated with a second transmission into second packets; and,

encoding the second plurality of data bits by assigning each

20   second packet to a corresponding member of the second subset.

2.   A method as defined in Claim 1, wherein the communication system comprises a CDMA communication system.

3.   A method as defined in Claim 1, wherein the first plurality of data bits represents one or more of the group consisting of an audio signal, a video signal, and a data signal.

4.   A method as defined in Claim 1, wherein the second plurality of data bits represents one or more of the group consisting of an audio signal, a video signal, and a data signal.

5.   A method as defined in Claim 1, wherein the first plurality of data bits requires a lower power level than the second plurality of data bits and the first number of members is higher than the second number of members.

6.   A method as defined in Claim 1, wherein the first plurality of data bits requires a higher data rate than the second plurality of data bits and the first number of members is higher than the second number of members.

7.   A method as defined in Claim 1, wherein the first plurality of data bits requires a lower error rate than the second plurality of data bits and the first number of members is higher than the second number of members.

8.   A method for encoding data for transmission in a communication system comprising the steps of:

partitioning a set of orthogonal codes into a subset with at least three members;

partitioning a plurality of data bits into packets; and,

encoding the plurality of data bits by assigning each packet to a corresponding member of the subset.

9.   A method for increasing the terminal capacity of a CDMA communication system, comprising the steps of:

providing a set of orthogonal codes;

assigning at least three of the orthogonal codes in the set to a transmission; and,

decreasing power associated with the transmission thereby increasing the number of transmissions capable of utilizing the CDMA communication system at a given time.

10.   A method for increasing the amount of data transmitted by a CDMA communication system, comprising the steps of:

providing a set of orthogonal codes;

assigning at least three of the orthogonal codes in the set to a transmission; and,

increasing a data rate associated with the transmission thereby increasing the amount of data transmitted by the CDMA communication system.

5   11.   A method for decreasing the errors in a CDMA communication system, comprising the steps of:

providing a set of orthogonal codes;

assigning at least three of the orthogonal codes in the set to a transmission; and,

10   lengthening an error code associated with the transmission thereby decreasing the number of errors in the CDMA communication system.

12.   An apparatus for encoding a signal associated with a communication in a wireless communication system comprising:

15   a memory retaining a set of orthogonal codes;

a signal partitioner for partitioning the signal to be transmitted into packets having a number of members;

a code partitioner for assigning a subset of the set of orthogonal codes to the communication, the subset including at least

20   three codes; and

an encoder for mapping the packets of the signal to the subset of the orthogonal codes.

13. An apparatus as defined in Claim 12, further comprising a transmitter for transmitting the encoded signal.

14. An apparatus as defined in Claim 12, wherein the signal represents one or more of the group consisting of an audio signal, a video signal, and a data signal.

15. An apparatus as defined in Claim 12, wherein the communication system comprises a CDMA communication system.

16. An apparatus as defined in Claim 12, wherein the signal partitioner comprises software performed by a microprocessor.

17. An apparatus as defined in Claim 12, wherein the signal partitioner comprises an integrated circuit.

18. An apparatus as defined in Claim 12, wherein the code partitioner comprises software performed by a microprocessor.

19. An apparatus as defined in Claim 12, wherein the code partitioner comprises an integrated circuit.

20.   An apparatus as defined in Claim 12, wherein the encoder comprises software performed by a microprocessor.

21.   An apparatus as defined in Claim 12, wherein the encoder comprises an integrated circuit.